

General description of the setup ... 31519  
S/627/60/002/000/001/027  
D299/D304

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki  
MGU, Moskva (Scientific Research Institute of Nuclear  
Physics Moscow State University, Moscow)

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STRUGAL'SKIY, Z.S.

(4)

31526  
S/627/60/002/000/008/027  
D299/D305

3.2410 (1559, 2205, 1705)

AUTHORS: Vernov, S. N., Goryunov, N. N., Dmitriyev, V. A., Ku-  
likov, G. V., Nechin, Yu. A., Solov'yeva, V. I., Stru-  
gal'skiy, Z.S., and Khristiansen, G. B.

TITLE: Study of lateral-distribution function of charged par-  
ticles and of the energy density of the electron-photon  
component of extensive air showers

SOURCE: International Conference on Cosmic Radiation. Moscow,  
1959. Trudy. v. 2. Shirokiye atmosferye livni i kas-  
kadnyye protsessy, 117-122

TEXT: The data obtained by means of the diffusion chamber and the  
hodoscoped counters permit determining the particle distribution in  
the neighborhood of the shower axis as well as at large distances  
from it. These data can be used for determining the number of par-  
ticles and the position of the axis to an accuracy of approximately  
1 m by means of the hodoscoped counters, and to an accuracy of se-  
veral centimeters if the axis lies within the limits of the diffu-

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Study of lateral-distribution ...

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sion chamber. The electron-photon component at large distances from the axis was studied by means of large ionization chambers, shielded with lead. During 1000 hours of operation, 28 cases were recorded of the axis (of showers with number of particles  $N \geq 10^5$ ) passing through the core detector. All these showers were investigated in detail with respect to distribution and energy of particles. The cases most favorable for analysis are those, in which the shower axis lies in the diffusion chamber. In all, 7 such cases were recorded. For each of these showers, the lateral-distribution function of particle density was constructed for distances ranging from 5 cm to 1 m from the shower axis. It was found that the form of the distribution function varied from shower to shower in the core region. In that region, a peculiar feature of particle distribution was observed, namely a narrow beam (4 cm in diameter) of particles, consisting of a large number (4 to 15) of particles with collinear tracks. From data obtained by means of the hodoscoped counters and knowing the position of the shower axis, it is possible to construct the distribution function of charged particles up to a distance of  $r = 25$  m. from the axis, for each individual

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Study of lateral-distribution ...

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Shower. Then the experimental distribution functions were compared with the theoretical functions of Nishimura and Kamata. The results of the comparison are shown in a table. A difference was noted in the form of the distribution of the energy flux of the electron-photon component in the individual shower at a distance of  $r \sim 1$  m, and at large distances from the axis; this is due to local fluctuations in the form of the energy distribution in the core. In each of the investigated showers, the energy flux of the electron-photon component was found within a radius of 25 m; it turned out that the electron-photon component energy-flux was stronger (on the average) in showers with small  $s$ , than in showers with large  $s$  ( $s$  being the "age parameter"). The system of counters permitted recording showers with number of particles  $N = 10^4$  to  $10^7$ . The data yielded by the diffusion chamber were used for constructing the distribution function for distances  $r < 1$  m from the shower axis. The conclusion was reached that the form of the electron-photon energy distribution-function does not depend on the number of particles in the shower. Therefore, all the data were referred to a shower with same  $N$ , and the average energy-density distribution

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Study of lateral-distribution ... <sup>31526</sup>  
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tion constructed. Approximating this distribution by a power law of type  $r^{-n}$ , one obtains for the exponent  $n$  the following values (as a function of the distance  $r$  from the axis):

- $n = 1,2 \pm 0,2, \quad 0,1 < r < 1 \text{ m}$
- $n = 1,5 \pm 0,2, \quad 1 < r < 10 \text{ m}$
- $n = 2,0 \pm 0,3, \quad 10 < r < 60 \text{ m}$
- $n = 2,6 \pm 0,2, \quad 60 < r < 1000 \text{ m}$

+

Further, the mean energy per electron was obtained from experimental and theoretical values (based on the cascade shower theory) of the mean energy as a function of  $r$  showed a discrepancy which can be removed by taking into account the effect of nuclear scattering. The experimental values permit calculating the energy of the

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Study of the lateral-distribution ...

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electron-photon component, viz.  $E_{eph} = 2.5 \beta N$ , where  $\beta$  denotes the mean energy loss per unit of depth  $t$ . There are 2 figures, 1 table and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Nishimura, K. Kamata. Suppl. Theor. Phys., no. 6, 1958.

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21(7)

**AUTHORS:** Vernov, S. N., Goryunov, M. S., Katsenlin, G. S., Kallitov, S. V.,  
Kechin, Ya. A., Strugaľ'skiy, Z. S., Christiansen, G. B.

**TITLE:** Investigation of the Core of Extensive Atmospheric Showers  
(Issledovaniye yvoya shirokogo atmosfornogo liva)

**PERIODICAL:** Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,  
Vol 36, Nr 3, pp 669-681 (USSR)

**ABSTRACT:** The group of research scientists followed a suggestion made by D. V. Skobel'tsyn to investigate the passage of extensive atmospheric showers through matter slabs, simultaneously in different depths in this connection an investigation of the shower core was carried out. Figure 1 shows a block diagram of the experimental arrangement used, which furnished data on the electron-photon and the nuclear-active components of the shower core. The experimental system consisted essentially of a diffusion chamber (0.64 m<sup>2</sup>), 124 ionization chambers (Ceyger, Muller) hodoscope counters of different sizes. The method, which is described in detail, is described in detail.

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and the possibilities it offers are discussed. The entire device remained in operation for 1500 hours and recorded more than 10,000 passages of extensive air showers. Within 1,000 hours 28 passages of showers were obtained with a shower particle number of  $N > 10^5$  through slabs with a shower particle chamber for such a passage and the diagram of the diffusion chamber of 64 ionization chambers. The corresponding pulse oscillogram of 64 ionization chambers. The article gives numerous individual data concerning different showers. It gives the ionization distribution in the 64 ionization chambers, the first and second rows respectively for  $N = 5 \cdot 10^5, 1.3 \cdot 10^5$  and  $N \approx 10^5$  with a spatial distribution of energy flux  $\sim 1/r^3$  (Fig 6). Figure 8 shows the same, expressed by the number of relativistic particles passing through the ionization chambers of the first and second row for  $N = 10^4$  and  $2 \cdot 10^4$  and an energy flux  $\sim 1/r^2$  and  $\sim 1/r$ . Figures 6 and 8 show the particle flux distribution in the diffusion chamber for  $N = 2 \cdot 10^6$  and  $3.5 \cdot 10^4$  respectively. In extensive air

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showers with  $N > 10^5$  it was observed in the shower core ( $r < 1a$ ) that the total energy of nuclear-active particles is of the order of the energy of the electron-photon component at the same distance from the electron-photon core. However, the ratio of these values for individual showers, the energy current density of the electron-photon component shows an increase of up to  $r = 20 \cdot 10^4$  cm from the shower axis; the course of energy flux density in dependence on  $r$  cannot be represented by a general formula. It fluctuates between  $\sim 1/r^2$  and  $\sim 1/r^3$ . The energy fluxes of electron-photon and nuclear-active components of the shower core show considerable fluctuations (up to 10 times). The authors finally thank Academician D. V. Skobel'tsin for his help and interest, V. T. Borisovskiy for his collaboration, Professor M. A. Borotin for his help and discussions, and further also a group of collaborators of the USSR: A. T. Arslanov, S. S. Chacot'skiy, S. V. Subbotin, I. S. Veril'kin, A. B. Zhmurov, L. R. Sosnov for their help in carrying out experiments. There are 8 figures, 2 tables, and 12 references, 11 of which are Soviet.

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**ASSOCIATED:** Vostokhly gosudarstvennyy universitet  
Krasnodar State University  
Fizicheskoy Institut Im. P. S. Lebedev, Institut Nauk SSSR  
(Physics Institute Im. P. S. Lebedev of the Academy of Sciences, USSR)

**RECEIVED:** 3-1/21, 1959

KONOVALOVA, L.P.; OKHRIMENKO, L.S.; STRUGAL'SKIY, Z.S.

Determining the energy of gamma-ray quanta in a xenon bubble chamber. Prib. i tekhn. eksp. 6 no. 6:26-31 N-D '61. (MIRA 14:11)

1. Ob'yedinennyy institut yadernykh issledovaniy. 2. Institut yadernykh issledovaniy, Varshava (for Strugal'skiy).  
(Bubble chamber)  
(Gamma rays)

ACCESSION NR: APL4011477

P/0045/63/024/004/0509/0513

AUTHOR: Czyzewski, O.; Danysz, J.; Strugalski, Z.

TITLE: Photon energy measurement in xenon bubble chamber in the energy interval 20--1000 MeV

SOURCE: Acta physica polonica, v. 24, no. 4, 1963, 509-513

TOPIC TAGS: Photon energy measurement, xenon bubble chamber, cascade process, positron track, electron range

ABSTRACT: The paper presents a quick and simple method of measuring the photon energy in a xenon bubble chamber in the interval 20--1000 Mev, being a development of the method proposed by Strugalski (Dubna, 1961) and based on the principle that the sum of all ranges of electrons generated in the cascade process initiated by photons is approximately proportional to the photon energy. The difficulty of measuring the coordinates of many points on the track (as necessitated by the strong coulomb scattering to determine the length of the track by the ordinary method) was avoided by measuring the total length of all electron

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ACCESSION NR: AP4011477

tracks in the photo on the screen of the scanning projector, using the curvimeter. The ranges of 272 positrons were measured, taking into account only those cases in which the mean angle between the positron track and the photograph plane was less than  $40^\circ$ . One hundred cascades, properly situated in the chamber, fulfilled the criteria: 1) the photograph is not overloaded with tracks not correlated with the cascade; 2) the cascade develops fully inside the chamber; 3) the angle between the cascade axis and the photograph plane is less than  $25^\circ$ . Some of the high-energy cascades (above 600 Mev) did not fulfil condition 2, and only a part of the energy was measured directly. To estimate the photon energy, one must measure the sum of ranges of electrons and the "development length" ( $= d =$  "distance between the photon conversion point and the boundary of the visible volume, measured in the direction of photon flight"), determined by the chamber geometry, visibility conditions, presence of the background of other cascades, etc. These two parameters can be used to determine the photon energy from fig. 3, where the sum of the ranges of electrons is plotted against "d". The upper limit of error due to ionization and radiation straggling is 20% divided by the square root of the number of secondary pairs. Fig. 4 shows the dependence of the fluctuation error on "d".

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ACCESSION NR: AP4011477

"The authors are indebted to Dr. L. M. Gramenitskii for helpful discussions and to Dr. J. Loskiewicz for valuable suggestions."

Original has 5 graphs.

ASSOCIATION: Joint Institute of Nuclear Research, Dubna, SSSR.

SUBMITTED: 20Apr63

DATE ACQ: 22Jan64

ENCL: 00

SUB CODE: PH

NO REF SOV: 000

OTHER: 002

Card 3/3

L 15528-63

EWT(m)/BDS AFFTC/ASD

s/0056/63/045/002/0013/0017

ACCESSION NR: AP3005235

AUTHORS: Nichiporuk, B.; Strugal'skiy, Z. S.

54  
52

TITLE: Investigation of ~~fluctuations of~~ <sup>19</sup> electron-photon showers in xenon

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 13-17

TOPIC TAGS: electron-photon shower, xenon, longitudinal development, shower maximum, bubble chamber, Xe

ABSTRACT: The electron-photon showers produced by gamma quanta resulting from the decay of neutral pions, created in interactions between 9-BeV/c negative pions and xenon nuclei, were investigated in a 30-liter xenon bubble chamber, with an aim at tracing in detail the development of the shower over its entire depth and at studying the fluctuations in the longitudinal development of the shower. The average total shower energy was 4 BeV. The procedure was based on an experimental determination of the variation of the average number of the electrons and photons and their mean-square fluctuations due to the gamma quanta with the depth of the shower. The experimental results agreed well with the cascade curve calculated for the xenon. The position of the maxima of the shower

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L 15528-63

ACCESSION NR: AP3005235

development fluctuate between 4 and 7 radiation lengths (3.8 cm for xenon) with an average of 5 radiation lengths. The fluctuations in showers with total energy 4 BeV are minimal in xenon near the maximum of shower development. "The authors are grateful to I. M. Gramenitskiy for discussions." 2  
Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Ob'yedinenny\*y institut yaderny'kh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 07Jan63

DATE ACQ: 06Sep63

ENCL: 002

SUB CODE: PH

NO REF SOV: 006

OTHER: 022

Card

2/42

L 2120-65 EWT(m) DIAAP/AFWL/SSD/ESD(t) S/0056/64/047/003/0801/0805  
ACCESSION NR: AP4046389

AUTHORS: Gramenitskiy, I. M.; Okhrimenko, L. S.; Slovinskiy, B.;  
Strugal'skiy, Z. S. 16  
11

TITLE: Estimate of the cross section for the charge exchange of  
negative pions on quasi-free protons at 9 GeV/c

19  
SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47,  
no. 3, 1964, 801-805

TOPIC TAGS: charge exchange, pion proton scattering, exchange cross  
section, elastic scattering, bubble chamber

ABSTRACT: In view of the scarcity of data on the exchange scattering  
of negative pions by protons in the energy region of several GeV,  
the authors investigated the exchange scattering of 9 GeV/c negative  
pions by quasi-free protons in a xenon bubble chamber, with an aim  
at investigating the charge-exchange reaction

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L 2120-65  
ACCESSION NR: AP4046389



This was done by scanning twice the photographs obtained in the bubble chamber, and selecting all the prongless stars within a small region of the chamber. A total of 116 such events were selected from 55,000 stereo photographs. The angles between the  $\gamma$  quanta and the angles between the  $\gamma$ -quantum direction and the direction of the primary negative pion track were measured. Much attention is paid to the separation of the background events and the events which can be mistaken for the investigated charge-exchange reaction. The final estimate for the reaction (1) is found to be  $0.48 \pm 0.18$  mb for scattering by xenon and  $0.04 \pm 0.09$  mb for scattering by the exchange quasi-free proton. In the case of pions of 200 MeV energy, the exchange cross section is  $-0.03 \pm 0.03$  mb. This indicates that the elastic charge exchange of pions at 9 GeV/c is vanishingly small. The authors thank Ye. Bogdanovich, V. G. Grishin, and M. I. Podgoretskiy for useful discussions, and also N. Smirnova and L. Mas-

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L 2110 89  
ACCESSION NR: AP4046389

2

Iova and G. Stroykova for help with the work." Orig. art. has: 3 figures, 4 formulas, and 1 table.

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: 21Mar64

ENCL: 00

SUB CODE: NP

NR REF SOF- 007

OTHER: 008

Card 3/3

GRAMENITSKY, Y. I.M.; OKHRIMENKO, I.S.; SIGVINSKIY, B., STRUGAL'SKIY, M.S.  
[Strugalski, Z.]

Estimation of the charge-exchange cross section of  $\pi^-$ -mesons on  
quasi-free protons at 9 Gev./c. Zhur. eksp. i teor. fiz. 47 no.  
3:601-605 S '64. (MIRA 17:11)

1. Ob'yedinennyy inatitut yadernyykh issledovaniy. 2. Sotrudnik  
Varghavskogo Instituta yadernyykh issledovaniy, Pol'sha (for Strugal'skiy).

KHODIYEV, E.M., assistant; STRUGANOV, A.G., dotsent

Congenital arteriovenous aneurysm of the left forearm simulating  
a traumatic aneurysm. Med. zhur. Uzb. no.1:87-88 Ja '62.  
(MIRA 15:3)

1. Iz kafedry fakul'tstskoy khirurgii sanitarnogo i  
pediatricheskogo fakul'tetov (zav. - prof. V.K. Yasevich)  
Tashkentskogo gosudarstvennogo meditsinskogo instituta.

(ANEURYSM)

(ARM—BLOOD SUPPLY)



FRANCE, R.V.

Condition of railroad transportation in France. p. 31.  
Device for hydrating road cars. p. 42.  
Télégraphie, Sofira, Vol. 7, no. 4, 1955.

See: Monthly list of East European Accessions, (SML), IS, Vol. 4, n. 10, Oct. 1955,  
Encl.

STRUGANOV, K.V.

Lavr Dmitrievich Proskuriakov. Put' i put.khoz. no.12:41 D  
'59. (MIRA 13:4)  
(Proskuriakov, Lavr Dmitrievich, b. 1858)

STRUMAROV, Kh.

"Agricultural Cooperatives in the Village of Maslarevo Continue to Develop." p. 4,  
(KOOPERATIVNO ZEMEDELIE, Vol. 10, No. 2, Feb. 1955, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

STRUGAROV, KH.

AGRICULTURE

Periodical: OTCHETNOST I KONTROL NA SELSKOTO STOPANSTVO. Vol. 3, No. 3, 1958.

STRUGAROV, KH. Giving accounts for the first four months on the cooperative farms. p. 84.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 2  
February 1959, Unclass.

TITEICA, R.; PALADE, Gh.; BANATEANU, Gh.; STRUGARU, Al.

Research on the absorption spectrum of Congo red. Bul  
Inst Petrol Rum 9: 189-197 '63.

ROGOJAN, Al.; POP, E.; STRUGARU, G.

Impulse characteristics of some cores of Rumanian ferrites.  
Studii tehn Timisoara 10 no.1:93-99 Ja--Je '63.

STRUGARU, C.; ISTRAIE, I.

Products resistant to high temperatures, moisture, and  
dynamic stresses based on butyl rubber. Rev chimie Min petr  
14 no.7:391-397 J1 '63.

STRUGARU, C.

A stabilized redresser with transistors. No. ST of Tehn Tim  
9 no.2:533-538 J1-D '64.

URSU, I.; STRUGARU, D.; PALADI, M.

Concomitant study of the isotopic exchange reactions and catalytic combustion of hydrogen in the Pt-C system.  
Comunicarile AR 13 no. 9:799-804 S'63.

1. Membru corespondent al Academiei R.P.R. (for Ursu).

GHIDU, I.; MARGARU, M.; IRINGAN, O.

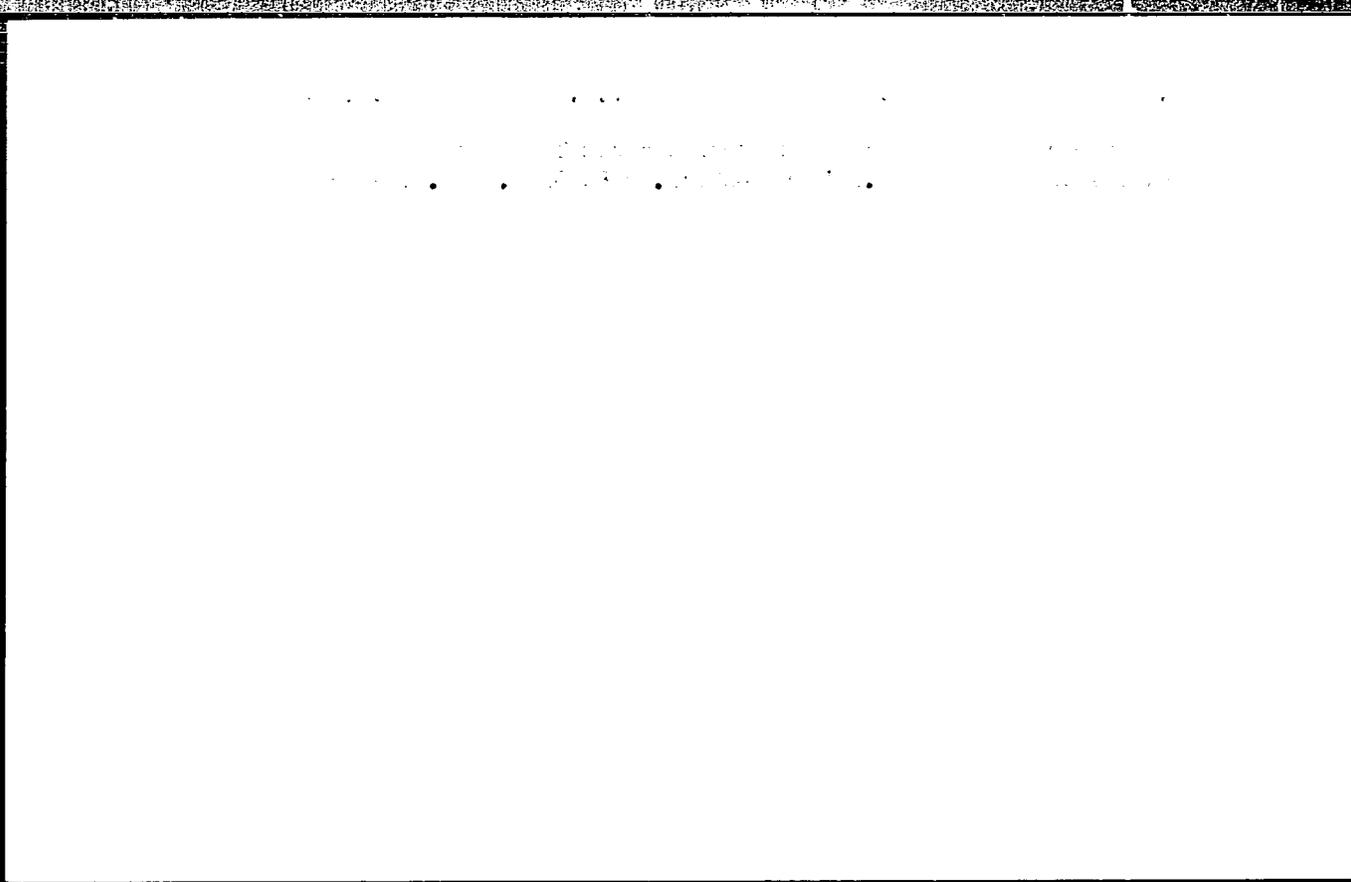
Catalytic activity of some platinum chloride-iridium trichloride  
catalyzers for the hydrogen-methylic aliphatic isotopic change.  
Rusia cerc. fiz. 17, no.4:421-427, 1963.

1. Universitatea "Babeş-Bolyai" Catedra de electricitate,  
magnetism si fizica atomica, Institutul de fizica atomica Sectia  
Gid). 2. Membru corespondent al Academiei R.S.R. (for USSR).

MARCULETIU, V.T.; STRUGARU, I.

Recovery of bismuth from Rumanian concentrates. Bul Inst  
Politeh 26 no.5:65-68 S-0 '64.

1. Chair of Inorganic and Analytical Chemistry, Polytechnic  
Institute, Bucharest.



L 08915-67 FSS-2/ENT(1) IJP(c) JGS/GW

SOURCE CODE: UR/0269/66/000/004/0018/0018

ACC NR: AR6025337

2/

AUTHOR: Strugatskaya, A. A.TITLE: Photographic observations of Venus on the mountain station GAO AN SSSRSOURCE: Ref. zh. Astronomiya, Abs. 4.51.135REF SOURCE: Tr. 16-y Astrometr. konfer. SSSR, 1963. M.-L., Nauka, 1965, 71-74TOPIC TAGS: ~~astrometry~~ <sup>camera</sup> planetary photography, Venus, astrometry, microscope/KIM-3 microscope

ABSTRACT: Observations were conducted in Dec 1962-Jan 1963 with the expedition astrograph GAO AN SSSR (D=230mm, F=2.3m) using a planet camera of the Markovits lunar camera type (Ref. zh. Astr. 1964, 1.51.184). Plate evaluations(22) were made on the KIM-3 instrument with the eyepiece reticule in form of concentric circles, which, in the opinion of the author, should reduce the phase effect influence. A table and a graph of the O-C differences are given; on the deviations of the individual O-C values from the smoothed curve, the RMS errors were obtained (including catalogue errors of base stars):  $\sigma_{\alpha} = \pm 0^{\circ}.025$ ;  $\sigma_{\delta} = \pm 0^{\circ}.26$ . Measurement errors of the intrinsic images of Venus are  $\pm 0^{\circ}.012$  and  $\pm 0^{\circ}.14$ , and the error of one Venus position (depending upon catalogue positions and measurements of stars) is  $\pm 0^{\circ}.016$  and  $\pm 0^{\circ}.26$ . [Translation of abstract].

SUB CODE: 03, 14

UDC 522.61:523.42

Card 1/1

BRONNIKOVA, N.M.; KISELEVA, T.P.; STRUGATSKAYA, A.A.; CHUDOVICHEVA, O.N.

Exact positions of minor planets computed from photographic  
observations at Pulkovo. *Biul. Inst. teor. astron.* 10 no.1:  
81-87 '65. (MIRA 18:12)

1. Submitted May 9, 1964.

STRUZATSKAYA, L.Ye.

Immunodiagnosis in intestinal helminthiasis. Izv.AN Uz.  
SSR.Ser.med. no.4:95-100 '58. (MIRA 12:5)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut.  
(WORMS, INTESTINAL AND PARASITIC)

STRUGATSKAYA, L.Ye., assistant

Dermato-allergic and serological reactions with full-value  
antigens in some types of helminthiasis. Med.zhur.Uzb. no.7:  
31-34 JI '58. (MIRA 13:6)

1. Iz kafedry obshchey gigiyeny (zav. - prof. S.N. Babadzhanov)  
Tashkentskogo gosudarstvennogo meditsinskogo instituta.  
(ANTIGENS AND ANTIBODIES)  
(WORMS, INTESTINAL AND PARASITIC)

STREBNAKAMA, L.Ye., Cand Med Sci -- (diss) "Study of  
the diagnostic value of allergic and serological reactions  
in ascariidiasis and teniarinchi<sup>by</sup> ~~in~~ <sup>vs. "infestation"</sup> in man." Tashkent, 1959  
10 pp (Min of Health UKSSR. Tashkent State Med Inst) 2:0 copies  
(ML, 34-59, 110)

↑  
infestation

SOV-4-98-8-01/85  
AUTHOR: Strugatskiy, Boris and Strugatskiy, Arkadiy  
TITLE: A Spontaneous Reflex (Spontanny refleks)  
PERIODICAL: Znaniye-sila, 1958, Nr 9, pp 24-28 (USSR)  
ABSTRACT: Fiction.  
1 Literature--USSR

Card 1/1

AGEKYAN, T.A.; KAVRAYSKAYA, K.V.; PLYUGIN, G.A.; STRUGATSKIY, B.N.;  
SHISHKINA, G.A.

An indication of the interaction of stars and diffuse matter.  
Astron.zhur. 33 no.5:679-681 S-O '56. (MLHA 9:12)

1. Astronomicheskaya observatoriya Leningradskogo gosudarstvennogo  
universiteta.  
(Stars) (Interstellar matter)

POTTER, Kh.I.; STRUGATSKIY, B.N.

Asymmetry of the figure of major planets. Izv.GAO 23 no.1:145-150  
'62. (MIRA 16:12)

L 40816-65 EWT(1)/EWG(v)/EEC-:/EEC(t) P. 4/Pe-5/Pq-4/Pac-4/Pae-2 CS/GH  
ACCESSION NR: AT5009180 UR/0000/63/000/000/0113/0116

AUTHOR: Polozhentsev, D.D.; Strugatskiy, B.N.

TITLE: Computation of ephemerides of the sun and planets of the earth group on computers for analysis of meridian observations

SOURCE: Astrometricheskaya konferentsiya SSSR, 15th, Pulkovo, 1960. Trudy. Moscow, Izd-vo AN SSSR, 1963, 113-116

TOPIC TAGS: ephemeris, sun, planet, meridian observation, Mercury, Mars, Venus

ABSTRACT: The Vychislitel'naya laboratoriya (Computation Laboratory) of the GAO AN SSSR was assigned the responsibility for preparing ephemerides of the sun and planets for each day in 1961-1965 for facilitating the analysis of meridian observations of these bodies. This paper briefly describes the preparation of these ephemerides. The authors note that the effective use of such ephemerides would be 3-8% for Mercury and Mars; 12-18% for Venus and 30-32% for the sun. Ephemerides for the sun were prepared by computing  $\alpha$  and  $\delta$  for the times of upper culmination at a particular observatory (with an accuracy to  $0^{\text{B}}.01$  for  $\alpha$  and  $0'' . 1$  for  $\delta$  ), the correction for parallax, the time of passage of the

L 40816-65

ACCESSION NR: AT5009180

half-diameter of the sun across the meridian, and the approximate zenith distance. For Venus and Mars the procedure involved computation of  $\mathcal{L}$  and  $\zeta$  for the times of upper culmination at the particular observatory and the interpolation factor. For Mercury the computations included approximate  $\mathcal{L}$  and  $\zeta$  for the times of the upper culmination at a particular observatory, the interpolation factor and the fourth and fifth differences of coordinates. The initial data used were the geocentric ephemerides of the sun, Mercury, Venus and Mars for 0000 hours ephemeris time for each day of 1961-1965 prepared by the Institut teoreticheskoy astronomii AN SSSR (Institute of Theoretical Astronomy, AN SSSR). The sequence for computation of solar ephemerides consists of four steps: a) Computation of the interpolation factor for interpolation of  $\mathcal{L}_0$ ,  $\zeta_0$  and the radius vector for the time of the upper culmination at the meridian of a particular observatory; b) Computation of  $\mathcal{L}_0$ ,  $\zeta_0$  and the radius vector  $R_0$  for the times of the upper culmination; c) Computation of zenith distances and parallax corrections; d) Computation of the angular half-diameter of the sun and the time of passage of the sun across the meridian. "In conclusion, the authors express sincere appreciation to N. M. Terent'yev, senior scientific worker at the Vychislitel'nyy tsentr LOMI AN SSSR (Computation Center, LOMI AN SSSR), K. N. Tavastsherna, senior scientific worker at the Glavnaya astronomicheskaya observatoriya AN SSSR (Main Astronomical Observatory AN SSSR), laboratory worker

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ACCESSION NR: AT5009180

2

Z. T. Ratnikova and master mechanic V. A. Kuz'min for participation in the work of preparing the new ephemerides". Orig. art. has: 9 formulas and 2 tables

ASSOCIATION: None

SUBMITTED: 6Apr63

NO REF SOV: 001

ENCL: 00

SUB CODE: AA

OTHER: 001

Card

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3/3

*Strugatskiy, L.F.*

ANDON'YEV, S.M.; ZHLOBINSKIY, Ye.I.; YUR'YEV, M.A.; STRUGATSKIY, L.F.;  
YELISEYEV, B.V.; TSELUYKO; Yu.I.; SUVOROV, A.I.; FILIP'YEV, O.V.;  
KALASHNIKOV, P.A.; L'VOV, V.N.; SULOYEV, Y.A.

Evaporation cooling of rolling-mill heating furnaces in open-hearth-  
furnace plants and complex utilization of secondary power resources.  
Prom. energ. 14 no.1:37-39 Ja '59. (MIRA 12:1)  
(Furnaces, Heating) (Boilers)

S/137/61/000/012/017/149  
A006/A101

AUTHORS: Doroshev, Yu. P...Strigatskiy, L. P.

TITLE: A unit for vacuum treatment of steel during teeming into molds

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 56, abstract  
12V338 ("Tr. Proyekt. tekhn. i n.-i.in-ta, Gor'kovsk. sovnarkhoz"  
1960, no. 2 (4), 12 - 19)

TEXT: At the Gor'kiy Metallurgical Plant, a unit for vacuum treatment of steel in molds was designed, built and put into operation. (The ingot weight was 3.8 tons). The first-priority section of the unit is intended for vacuum treatment of X 23H18 (Kh23N18) steel melted in medium capacity electric furnaces. The unit includes 2 vacuum (rotation) pumps type BH -6 (VN-6) and BH -4 (VN-4); a filter; a cooler (one pipe in another; the pumped-off gas passes through the inner pipe, the cooling water runs in the opposite sense through the outer pipe); a 15-m vacuum conductor; vacuum meters and a vacuum mold. In a conventional mold a recess is made at the junction with the riser. The riser differs from the conventional one by big bulgings at the top and lower portion, where grooves for the lid and a bulging for placing into the mold were chamfered. For the riser a

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Card 1/2

S/137/61/000/012/017/149  
A006/A101

A unit for vacuum treatment of...

steel lid was cast, onto whose top an intermediate funnel is welded. There is a special inspection hole with heat resistant glass in the lid and an exhaust tube, to which a rubber hose is fixed; the hose connects the mold with the vacuum conductor. The hole in the intermediate funnel is shut from below with a 1.5 mm Al plate. Residual pressure of 1.5 - 2.0 mm Hg is developed in the mold immediately before teeming. The vacuum in the mold is maintained until the metal ascends into the riser. The first tests have shown that vacuum teeming of Kh23N18 steel increased  $a_c$  by 20%; the H content decreased by 44%. ✓

P. Arsent'yev

[Abstracter's note: Complete translation]

Card 2/2

14 17

PROCESSES AND PROPERTIES INDEX

The molecular condition of the silicotungstates of the alkaloids. B. A. Klyachkina, M. K. Strugatzkii and F. D. Zilberg. *Sov. Nauch.-Issledovatel. Khim. Farm. Inst.* 1931, 203-8; *Chem. Zvest.* 1932, 1, 1376.—The titration of nicotine in HCl with silicotungstic acid indicates that the complex formed contains 1 mol. silicotungstic acid to 2 moles. nicotine. This titration can be used when the amt. of nicotine is not sufficient for acidimetric titration. Thebaine can also be titrated; it reacts with silicotungstic acid in the ratio 4:1. In this way a long series of alkaloids can be titrated very accurately, even when present in very small amts. Silicotungstic acid is tetra-basic toward the alkaloids; they combine with it in stoichiometric ratios 4:1 or 2:1. Silicotungstates having 5, 6, or more moles. of alkaloid per mol. of the acid are not known. Substances combining with the acid in the ratio 4:1 are: cocaine, methylecgonine, ecgonine, morphine, codeine, thebaine, papaverine, narcotine, hydrastine, atropine, piperine, haruline, harmaline, pilocarpine and strychnine (in aq. soln.); in the ratio 2:1 are physostigmine, quinine, nicotine, emetine, cephaline, anabasine, strychnine (in 15% HCl). Alkaloids with weakly basic N (disocn. const. less than  $10^{-11}$ ), which form no salts with acids in aq. soln., react with silicotungstic acid to form difficultly sol. salts.

M. G. Moore

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

COCAINE SILICOTUNGSTATE. B. A. Klyachkina, M. K. Strugatzkii and V. M. Merris.  
*Bull. Nauch.-Issledovatel. Khim.-Farm. Inst. 1931, 208-74; Chem. Zentr. 1932,*  
*11, 259.*—In previous work (cf. preceding abstr.) the ratio silicotungstic acid:cocaine  
 in the silicotungstate was found to be 1:4. Actually, however, the amt. of reagent  
 required depends upon the concn. of electrolyte. It is proved that the silicotungstate  
 ppt. is at first amorphous, and after some time becomes cryst. In the cryst. ppt. the  
 ratio is always 4 mols. alkaloid:1 mol. silicotungstic acid. The detn. may be carried  
 out in 2 ways. (1) The cocaine soln. in 0.5% HCl is treated with 5% aq. silicotungstic  
 acid and diluted to 100 cc. with 0.5% HCl. After warming 3-4 hrs. and standing  
 13-18 hrs. it is filtered, washed with 0.5% HCl, etc. The wt. ppt.  $\times 0.426$  = wt.  
 cocaine. (2) The HCl soln. of cocaine is treated with a known amt. of silicotungstic  
 acid and then treated as in (1). An aliquot portion of the filtrate is then evapd. and  
 the residue heated to glowing. Its wt. multiplied by 5 gives the excess amt. of reagent  
 used.

M. G. Moore

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

ca

10

New series of homologs of the camphor group. X.  
 Benzylidene-camphane, a product of the dehydration of  
 tertiary benzylbornyl alcohol. S. S. Nametkin and M. K.  
 Strugatzki, *J. Gen. Chem.* (U. S. S. R.) 6, 802-7 (1936);  
*I. C. A.* 29, 3049. — Heating 102 g. of benzylbornyl alc.  
 (I) with an equimol. amt. of  $\text{KHSO}_4$  at  $150-60^\circ$  for 2-3  
 hrs. gave not the  $\alpha$ -benzylcamphene, as was expected  
 but 93 g. benzylidene-camphane,  $\text{C}_{15}\text{H}_{22}$ ,  $\text{CHPh}$   
 (II), m.  $25^\circ$ , b.p.  $160-1^\circ$ ,  $d_4^{20}$  0.9788,  $d_4^{20}$  0.9753,  $n_D^{20}$   
 1.5571. II oxidized with alk.  $\text{KMnO}_4$  gave camphor,  
 camphoric acid and  $\text{BrOH}$ . Phenyl- $\alpha$ -bornylcarbinol (cf.  
 Hesse, *Ber.* 39, 1150 (1906)) (11 g.) was heated with 1.7 g.  
 K in dry PhMe for 40 hrs. and then treated with 10 g. of  
 dry  $\text{CS}_2$ . The xanthate treated with MeI and decompd.  
 by heating at  $160^\circ$  gave a product identical with II ob-  
 tained by dehydration of I. Chas. Blanc

45-354 METALLURGICAL LITERATURE CLASSIFICATION

STRUGATSKIY, M. K.

The Atomic Nucleus and Its Energy (Atomnoye yadro i ego energiya), 26 pp, 1951.

All-Union Correspondence Power Engineering Institute

Book W-22517, 29 Apr 52

1. STRUGATSKIY, M.K.
2. USSR (60-)
4. Science
7. Laboratory works in general chemistry. Moskva, "Sovetskaia nauka," 1952

9. Monthly List of Russian Accessions, Library of Congress, March, 1953. Unclassified.

С/К/Р/О/Д/С/К/И/Й

STRUGATSKIY, Mikhail Konstantinovich; MADEINSKIY, Boris Pavlovich;  
STAROSEL'SKIY, P.I., otvetstvennyy red.; LIPKINA, T.G., red.izd-va;  
POPRYADUKHIN, K.A., tekhn.red.

[General chemistry] Obshchaya khimiya. Moskva, Gos.izd-vo  
"Sovetskaya nauka," 1957. 357 p. (MIRA 11:3)  
(Chemistry)

STRUGATSKIY, Mikhail Konstantinovich; NADEINSKIY, Boris Pavlovich;  
KHODZHAYEVA, I.V., red.; LIPKINA, T.G., red.izd-va; VORONINA,  
R.K., tekhn.red.

[General chemistry] Obshchaia khimiia. Izd.2., perer. Moskva,  
Gos.izd-vo "Vysshaia shkola," 1959. 388 p. (MIRA 13:5)  
(Chemistry--Handbooks, manuals, etc.)

STRUGATSKIY, Mikhail Konstantinovich; NADEINSKIY, Boris Pavlovich;  
TULUPOV, V.A., red.; AVRAMENKO, Ye.I., red.izd-va; GOROKHOVA, S.S.,  
tekhn. red.

[General chemistry] Obshchaia khimiia. Izd.3., perer.i dop. Mo-  
skva, Gos.izd-vo "Vysshaia shkola," 1961. 415 p. (MIRA 14:12)  
(Chemistry)

STRUGATSKIY, Mikhail Konstantinovich; MADEINSKIY, Boris Pavlovich;  
STUKOVNIK, N.D., Eds.

[General chemistry] Obshchaya khimiya. Moskva, Vysshaya  
shkola, 1965. 392 p. (MIRA 18:8)

GERUGATSKII, M.K.

[Chemistry: organic compounds; a manual for students  
registering at the Institute] Khimiia; organicheskie  
soedineniia. Uchebnoe posobie dlia postupaiushchikh  
v institut. Moskva, Vses. zaochnyi energ. in-t, 1965.  
43 p. (MIRA 19:1)

STRUGATSKIY, Yu.M., inzh. (Msokva)

Design of cylindrical shells of arbitrary section. Rasch. prostr.  
konstr. no.8:309-324 '62. (MIRA 16:6)  
(Elastic plates and shells)



STRUGOV, A. S.

USSR/ Geology - Ice action

Card 1/1      Pub. 86 - 25/36

Authors      : Strugov, A. S.

Title        : ~~Explosion of a "hydrolakkolith"~~  
Explosion of a "hydrolakkolith"

Periodical   : Priroda 44/6, page 117, Jun 1955

Abstract     : A party of scientists conducting field observations eastward from lake Baikal in 1938 witnessed the explosion of a "hydrolakkolith," a cupola-shaped hillock caused by the underground formation of ice. The resulting cavity immediately filled with water forming a small lake. Illustration.

Institution   : .....

Submitted    : .....

**STRUGOV, A.S.**

Surface of the Jurassic bedrock and its correlation to sedimentation  
in the Irkutsk coal-bearing basin. Izv.AN SSSR.Ser.geol. 20 no.6:42-45  
N-D '55. (MLBA 9:2)  
(Irkutsk Province--Geology, Stratigraphic)

15-57-7-9743

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,  
p 148 (USSR)

AUTHOR: ~~Strugov, A. S.~~

TITLE: Coal Potential and Coal Types in the Western Part of  
the Vilyuysk Depression (Perspektivy uglenosnosti i  
kharakter ugley zapadnoy chasti Vilyuyskoy vpadiny)

PERIODICAL: Tr. Labor. geol. uglya AN SSSR, 1956, Nr 6, pp 580-590

ABSTRACT: The author presents a detailed stratigraphy of the  
Mesozoic series (lower continental  $J_1^1$  --  $J_1^2$ , marine  
 $J_1^3$  --  $J_2^1$ , and upper continental  $J_2^2$  --  $J_3^3$  --  $Cr_1$ )  
and in particular, of the upper series which contains  
a large number of lignite coal seams. The substructure  
of the Mesozoic is formed by the Paleozoic, while the  
covering rock is composed of Quaternary deposits.  
Tectonically, this region is a part of the Vilyuysk

Card 1/2

16-47-1-0743

, Coal Potential and Coal Types (Cont.)

depression. The Paleozoic is deformed into pitching folds. The deposits of the Mesozoic are almost horizontal. The tectonic processes occurring since the beginning of the Mesozoic are described in this article. The accumulation of the regional coal-bearing series was universal, but accumulation of organic substance occurred only in separate basins. The petrographic character and chemical composition of the coal types of the upper continental series show these coals to be typical lignites. Some data are given on other deposits and their coal potential.

Card 2/2

Ye. G. Martynov

STRUGOV, A.S.

Ust'Murkha coal-bearing area in the Vilyuy Valley. Trudy  
L'vkh SSSR. Ser. geol. no. 4: 136-150 '59. (MIRA 12:3)  
(Vilyuy Valley--Coal geology)

STRUGOV, A.S.

Geology of the Kempendyay lignite deposit. Trudy IAFAN SSSR.  
Ser.geol. no.4:151-154 '59. (MIRA 12:8)  
(Kempendyay Valley--Lignite)

STRUGOV, A.S.

Petrography of coals of the Kempendyay deposits of the Vilyuy  
Basin. Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:3-5 '61.  
(MIRA 16:8)

(Vilyuy Basin--Coal) (Petrology)

LARINA, V.A.; STRUGOV, A.S.; GALAGANOVA, A.S.; KASHTANOVA, A.S.;  
AZIMOVA, G.A.

Coals of the Kempendyay deposit, their composition and properties.  
Izv. Fiz.-khim. nauch.-issl. inst. Irk. un. 5 no.1:6-12 '61.  
(MIRA 16:8)

(Vilyuy Basin--Coal--Analysis)

STRUGOV, V.

Leaflet-calendar of engineer Volkov. Bezopasna v prom. 7  
no.3:29-30 Mr '63. (MIRA 16:3)  
(Coal mines and mining--Safety measures)

STRUGOV, V.N.

Paddle vat for the processing of glue stock. Mon.-Nov.  
prom. 4 no. 7:35 01 '62. (MIRA 17:1)

SECRETARY, A.A., BACARDI, S.A., and others in the city of BACARDI, S.A.

... ..  
... ..  
... ..

STRUGOVETS, Ye.T.; REPIN, N.N.

Portable gas anchor. Mash. i neft. obor. no.5:33-34 '64.  
(MIRA 17:6)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

PROCESSES AND PROCEDURES

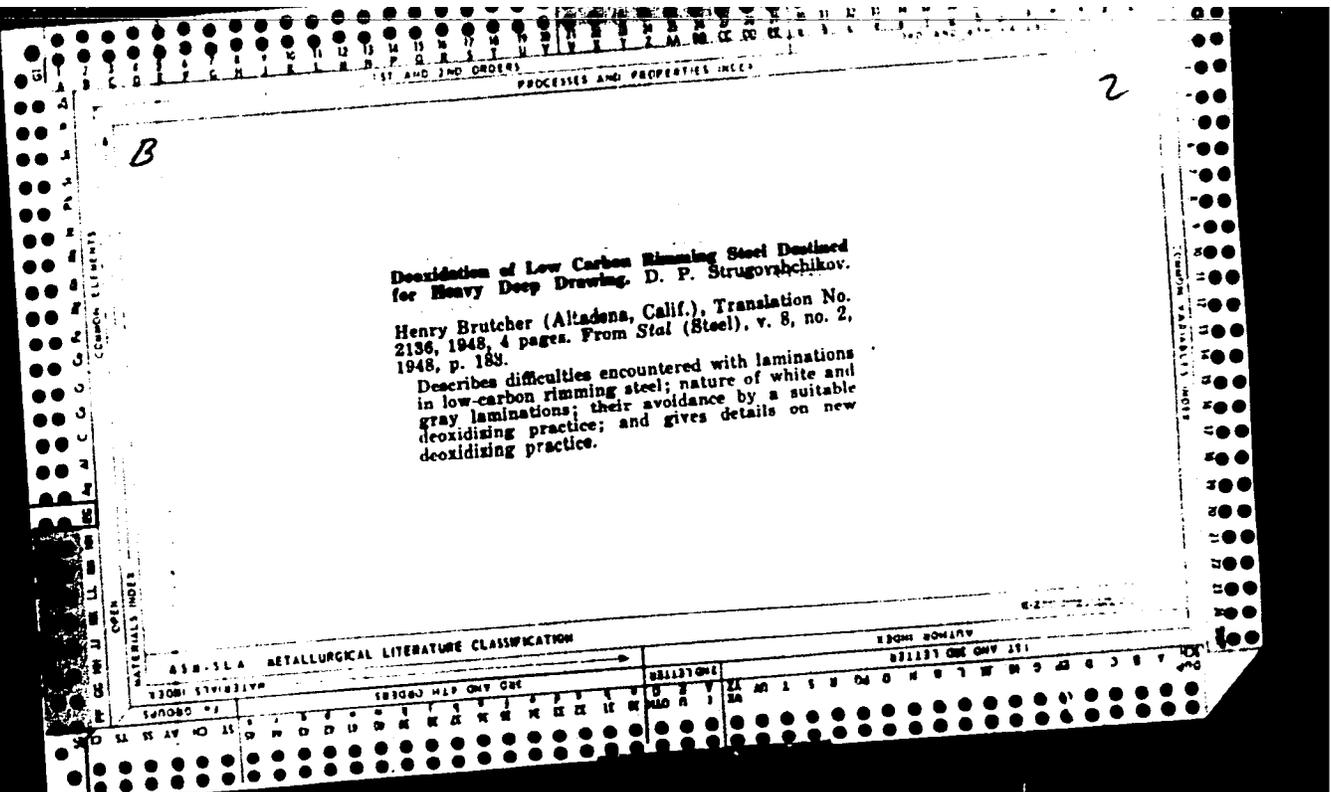
1ST AND 2ND COPIES

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CA

Comparative investigation of the quality of castings of metal cast killed and unkilld. V. P. Revchitsoy and D. P. Sirugovshchukova. *Ural. Met. O.* No. 1, 17-22 (1940); *Chem. Zentr.* 1940, II, 2535-6. —Tests were made on a killed-steel casting contg. C 0.09-0.1, Mn 0.43-0.44, Ti 0.005, Si trace and S and P 0.01-0.02% and on a steel cast unkilld contg. C 0.08-0.1, Mn 0.41-0.47, and S and P 0.01-0.03%. The casting from the killed steel showed practically the same content in nonmetallic inclusions with an essentially uniform distribution throughout the casting. Also, the distribution of C, Mn, P and S segregations was more uniform in this steel so that it was less vigorously attacked when etched by acids. In the case of the casting from the unkilld steel the middle portion with a higher content in segregations was especially vigorously attacked. Steel killed with Al and ferrotitanium showed least segregation (20-40%) with the most uniform distribution of the segregations and was least attacked by acids. The properties of the steel were not essentially affected by the addn. of 0.006-0.008% of Ti. As compared to steel cast in the unkilld condition, the grain structure was finer and the impact resistance and tensile strength were higher. M. G. Moore

METALLURGICAL LITERATURE CLASSIFICATION



9

CA

**Effect of titanium in low-carbon steel.** D. P. Strugovshchikov. *Stal* 8, 1131-2(1948).—From 0.02 to 0.06% of Ti was added to a rimmed steel and to a killed steel. From 0.02 to 0.04% of Ti did not interfere with the normal evolution of gases in a rimmed steel. Addn. of 0.06% reduced the gas evolution considerably. The FeO and N contents of rimmed steel were lowered by Ti. Other nonmetal inclusions were not affected. The Ti had no effect on segregation of C, S, and P, nor on the macro structure. The plastic properties of rimmed steel were affected adversely by Ti. In the killed steel, Ti induced greater d. and finer cryst. structure. Addn. of 0.11% Ti to steel killed with 0.11% Al increased the content of

impurities. Generally, the addn. of Ti to killed steel was beneficial. M. Hirsch

STRUGOVASHCHIKOV, D. P.

TA 18/49T90

USSR/Metals

Dec 48

Steel, Carbon  
Steel, Titanium

"Effect of Titanium on the Properties of Low-Carbon Steel," D. P. Strugovashchikov, Engr, Ural Inst of Ferrous Metals, 2 pp

"Stal'" No 12

Describes results of adding titanium to both bubble-containing and bubbleless low-carbon steels. Three tables show alteration in mechanical properties.

18/49T90

BTR

11632 *Proizvodstvo Malouglerodistoi Stali*, Production of Low Carbon Steel, D. F. Strugovshchikov, 216 pages, 1960, Government Scientific Technical Publishing House for Literature on Ferrous and Nonferrous Metallurgy, Sverdlovsk and Moscow, U.S.S.R. (TN730 5089p)  
Technology of the production of killed and un-killed low carbon steels is described in detail. Properties of steel, its flaws, and measures taken to eliminate them during melting and casting are also discussed, along with theoretical bases of the technology of melting and casting of steel.

STRUJAVSHENIKOV, D. I.

D. I. Strujavshenikov, Stalovar Martenovskoy pechi [The Open-Hearth Furnace Operator], Metallurgizdat, 20 sheets, 10,000 copies. 1954

The booklet describes the raw material, fuel, refractory, and charging materials for the production of steel by the open-hearth process, the working principle of the open-hearth furnace, preparation for operation, tending during operation, and automatic regulation of the heat cycle of the open-hearth furnace. It discusses the theory and practice of the open-hearth process and of casting steel, as well as technical control methods for smelting and pouring steel. It also considers the defects of ingots and disorders in open-hearth plants, and measures for their prevention. The booklet also describes experience in rapid steel smelting, technico-economic work indexes, and the basic problems of accident prevention in open-hearth plants.

The booklet is intended as a training aid for steel workers and apprentice steel workers.

SO: U-6472, 12 Nov 1954

STRUGOVSHCHIKOV, D.P.

[Steel-makers working at open-hearth furnaces; aid to steel-makers and their assistants] Stalevar martenovskoi pechi; uchebnoe posobie dlia stalevarov i ikh podruchnykh. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit -ry po chernoi i tsvetnoi metallurgii, 1953. 351 p. (MLRA 7:6)  
(Open-hearth process)

STRUGOVSHCHIKOV, Dmitriy Pavlovich; DUBROV, N.F., redaktor; KEL'NIK, V.P.,  
redaktor izdatel'stva; KOVALENKO, N.I., tekhnicheskii redaktor

[Steel casting; a technical manual] Razlivka stali; uchebnoe posobie  
dlia proizvodstvenno-tekhnicheskogo obucheniia rabochikh. Sverdlovsk,  
Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii,  
Sverdlovskoe ot-nie, 1956. 192 p. (MIRA 9:11)  
(Steel--Metallurgy)

BURDAKOV, D.D.; PANFILOV, M.I.; MEDVEDEV, I.P.; STRUCOVSHCHIKOV, D.P.; NIKOLAYEV,  
A.M.; KRASNOV, K.V.

Ways to expand old plants in the Urals. Stal' 16 no.9:818-820 S '56.  
(MLRA 9:11)

1. Glavuralmet Ministerstva chernoy metallurgii SSSR.  
(Ural Mountain region--Metallurgical plants)

18(3,5)

PHASE I BOOK EXPLOITATION

SOV/2585

Strugovshchikov, Dmitriy Pavlovich

Proizvodstvo malouglerodistoy stali (Manufacture of Low-carbon Steel) 2d ed., rev. and enl. Sverdlovsk, Metallurgizdat, 1959. 302 p. Errata slip inserted. 3,000 copies printed.

Ed.: N.F. Dubrov; Ed. of Publishing House: V.P. Kel'nik; Tech. Ed.: Ye.M. Zef.

PURPOSE: This book is intended for engineers and technicians in open-hearth plants and may also be useful to qualified steel workers.

COVERAGE: The book describes the processes of making rimmed and killed low-carbon steel. Properties of steel and steel defects (shrinkage cavities) are discussed, and methods of preventing the latter during the melting process are recommended. Both theoretical and practical data are given on the melting and teeming processes. Quality control of liquid steel and teemed ingots is discussed. Some information is also given on the pro-

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Manufacture (Cont.)

SOV/2585

duction of a number of types of low-carbon, low-alloy, and silicon transformer steel. There are 71 references, all Soviet.

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Card 2/8

STRUGOVSHCHIKOV, Dmitriy Pavlovich; NOVOLODSKIY, P.I., retsenzent; CHAPAYKINA, F.K., red.izd-va; TURKINA, Ye.D., tekhn. red.

[Steel casting; textbook for the training of qualified production workers] Razlivka stali; uchebnoe posobie dlia podgotovki kvalifitsirovannykh rabochikh na proizvodstve. Izd.2., ispr. i dop. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1961. 176 p. (MIRA 14:7)  
(Steel castings)

GREBINSKIY, S.O.; STRUGOVSHCHIKOVA, L.P.; LITEPLO, Ye.I.

Effect of high doses of X rays on the growth and metabolism  
of physiologically active substances in pea sprouts. Dokl.  
AN SSSR 146 no.2:471-474 S '62. (MIRA 15:9)

1. L'vovskiy gosudarstvennyy universitet im. I. Franko.  
Predstavleno akademikom A.L. Kursanovym.  
(Plants, Effect of X rays on)  
(Growth promoting substances)

STRUGOVSHCHIKOVA, L.P.

Gasoline formation in some species of yeast of the genus *Candida*.  
Mikrobiologiya 34 no.4:617-622 June '65.

(MIRA 18:10)

1. Biologicheskij fakul'tet Lvovskogo gosudarstvennogo universiteta  
imeni Iv. Franko.

BARYSHEV, P.M.; STRUGUSHCHENKO, Yu.M.; KHOMUTOV, T.Ya.

Therapeutic effectiveness of leptospirous  $\gamma$ -globulin; studies  
in Krasnodar Territory. Soy. med. 27 no.1:116-120 Ja '64.

(MIRA 17:12)

1. Laboratoriya leptospirozov (zav.- prof. A.A. Varfolomeyeva)  
Moskovskogo nauchno-issledovatel'skogo instituta vaktain i syvorotok  
imeni I.I. Mechnikova, kafedra epidemiologii (zav.- prof. V.V.  
Skvortsov) i Moskovskogo meditsinskogo instituta imeni N.I.  
Pirogova i Grivenskaya uchastkovaya bol'nitsa (glavnyy vrach  
T.Ya. Khomutov) Krasnodarskogo kraya.

STRUFAC, J.

Adjustment of the SKEM Le combine for sugar-beet harvesting. p. 376.  
(MECHANISACE ZEMĚDELSTVI, Vol. 7, No. 16, Aug 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

MANDAK, M.; STRUHAR, M.

Determination of sulfur in ichthammol and some preparations containing ichthammol. Cesk. farm. 10 no.9:456-459 '61.

1. Katedra galenickej farmacie Farmaceutickej fakulty UK, Bratislava.  
(ICHTHAMMOL chem) (SULFUR chem)

MANDAK, Milar, doc., PhMr. (Bratislava, Ulica Gdborarov 12); STRUHAR,  
Milan, LICNEROVA, Irena

Use of surface active agents in the preparation of extracts  
from drugs. Acta pharmac 6:127-146 '62

1. Department of Galenical Pharmacy, Faculty of Pharmacy,  
Bratislava.

MANDAK, Milan, doc. PhMr (Bratislava, Ulica Odbojarov 12); STRUHAR, Milan

Some possibilities to determine alkaloids in the Tinctura belladonae, Extractum Belladonae exsiccatum and Extractum hyoscyami exsiccatum. Acta pharmac 6:147-165 '62

1. Department of Galenical Pharmacy, Faculty of Pharmacy, Bratislava.

MANDAK, M.; STRUHAR, M.; KLUCAROVA, H.

CSOR

Dept. of Galenic Pharmacy, Pharmaceutical Faculty, Charles University (Katedra  
Galenickej Farmacie Farmaceutickej fakulty UK), Bratislava

Bratislava, Farmaceuticky Obzor, No 3, 1963, pp 97-105

"Contribution to the Determination of Tropic Alkaloids in Some Galenic  
Preparations"

(3)

2

CZECHOSLOVAKIA

STRUHAN, M; MANDAK, M; POBOCIKOVA, K.

Chair of Galenic Pharmacy of the Pharmaceutical Faculty UK  
(Katedra galenickej farmacie Farmaceutickej fakulty UK),  
Bratislava (for all)

Bratislava, Farmaceuticky obzor, No 4, 1963, pp 153-156

"Content of Some Galenic Preparations of Rhubarb Roots."

f

CZECHOSLOVAKIA

STRUMAR, M; MIRKOVA, A.

Chair of Galenic Pharmacy of the Pharmaceutical Faculty  
of UK (Katedra galenickej farmacie Farmaceutickej  
fakulty UK), Bratislava (for both)

Bratislava, Farmaceuticky obzor, No 6, 1963, pp 249-255

"Study of the Stability of Water Solutions of Atropinsulphate."

STRUHAR, Milan, promovany farmaceut, CSc. (Bratislava, Ul. Gdbojarov 12)

Contribution to the stability of aqueous atropine sulfate solutions. Acta pharmac 9: 9-118 '64.

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PHASE I BOOK EXPLOITATION SOV/5743

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Akademiya nauk SSSR. Mezhdunarodnyy komitet po provedeniyu  
Mezhdunarodnogo geofizicheskogo goda. V, razdel programy IIGG:  
Ionosfera.

Issledovaniya ionosfery; sbornik statey (Ionospheric Researches;  
Collected Articles. No. 3) Moscow, Izd-vo AN USSR, 1960.  
100 p. 2,000 copies printed.

Resp. Ed.: N. V. Mednikov, Candidate of Physics and Mathematics;  
Ed.: L. A. Trofimova; Tech. Ed.: T. V. Polyakova.

PURPOSE : This IGY publication is intended for geophysicists,  
astrophysicists, and other scientists concerned with the  
ionosphere and radio atmospherics.

COVERAGE: The collection of articles contains the results of  
investigations on the ionosphere and radio atmospherics, based  
chiefly on IGY observational data from USSR stations. The  
articles may be grouped into the three following categories:

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Ionospheric Researches; Collected (Cont.)

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1) studies of the morphology and physics of both quiet and perturbed ionospheres; 2) methodology of evaluating absorption and drifts in the ionosphere; and 3) questions on the use of ionospheric observations for practical purposes. No personalities are mentioned. English abstracts and references follow each article.

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